

Amendments to the Drawings:

Attached hereto is a replacement sheet of drawings containing a revised Figure 4 in which the reference numeral 115/135 has been replaced by 155, 165/255, 265 and a marked up copy of Figure 4 showing the above change in red. The Examiner is hereby requested to approve the corrected drawings.

Attachments: Annotated Sheet
 Replacement Sheet

REMARKS/ARGUMENTS

Re-examination and favorable reconsideration in light of the above amendments and the following comments are respectfully requested.

Claims 11 - 20 are pending in the application. Currently, all claims stand rejected.

In the office action mailed March 30, 2007, the Examiner objected to the drawings on the grounds that the reference number "115" had been used twice for different elements. By the present amendment, Figure 4 has been amended to delete the reference numeral "115/135" in favor of the reference numerals "155, 165/255, 265" and thus, moot the objection. Attached hereto is a replacement sheet of corrected drawings. The Examiner is hereby requested to approve same.

Further, in the office action, the Examiner rejected claims 11 - 15 and 18 under 35 U.S.C. 103(a) as being unpatentable over U.S. Publication o. 2003/0220643 to Ferree in view of U.S. Patent No. 5,180,393 to Commarmond; rejected claims 16, 17, and 19 under 35 U.S.C. 103(a) as being unpatentable over Ferree in view of Commarmond and further in view of U.S. Patent Publication No. 2002/0173791 to Howland; and rejected claim 20 under 35 U.S.C. 103(a) as

being unpatentable over Ferree in view of Commarmond and Howland.

The foregoing rejections are traversed by the instant response.

Independent claim 11 is directed to a linking element for a spinal fixation system designed to link at least two implantable connecting assemblies. The linking element comprises at least partly of a support made of polymer material and of two rods. The first of the rods is curved or not, substantially coaxial with the support. A second of the rods is formed of turns surrounding the first of the rods and the turns are at least partially embedded in the support.

Independent claim 18 is directed to a spinal fixation system comprising at least two implantable connecting assemblies linked by at least one linking element having the same structure as the linking element of claim 11.

A review of the Ferree publication shows that it fails to disclose or suggest the structure set forth in claim 11 for the linking element. The Examiner contends that Ferree discloses a device comprising a support made from plastic and a second rod (Figure 6(c) of the reference), which second rod is formed of turns partly embedded in the plastic support. This contention is wrong.

Even if one were to consider the spring 602 to be the second rod and the sleeve 610,612 to be the support, there are claim limitations not taught or disclosed by Ferree. For example, the spring 602 is not partly embedded in the plastic support (sleeve 610, 612). As indicated on page 2, paragraph 29, lines 7 to 9: "Fig. 6c is a side view of the alternative embodiment of the invention drawn in Fig. 6A, including sleeves 610, 612 placed over (emphasis added) the springs. In fact, the Ferree device could not function with embedded springs. As can be seen from FIG 6D, during a spinal flexion, a part of the spring extends out of the support and a gap 620 is formed between the pedicle screws and the supports (sleeves). If the turns of the spring 602 were embedded in the support, the gap 620 could not be formed during spinal flexion because the ends of the turns of the springs which are closer together than the length of the sleeve could not move. If anything, Ferree teaches a structure quite different from the claimed linking element.

Still further, Ferree does not disclose or suggest in the embodiment shown in FIG. 6(c), a first rod substantially coaxial with the support, which first rod is surrounded by the turns of the second rod. The Examiner does not identify what in Ferree is to be considered the first rod. If it is the pedicle screws, then the screws

are transverse to the axis of the sleeves. Still further, the springs do not surround any structure which could be called a rod.

With respect to Commarmond, it discloses an artificial ligament consisting of a longitudinal primary winding (20) arranged between the narrowed areas (5) and (15) of two successive eyelets (1, 10). The longitudinal primary winding (20) is covered by a transverse secondary winding (25) arranged in contiguous spirals around the longitudinal primary winding (20). The longitudinal primary winding (20) confers rigidity upon the assembly during traction. In contrast, the transverse secondary winding (25) acts as a wedge and gives the ligament stiffness during compression. The artificial ligament is arranged between each lumbar vertebra and the sacrum.

It is submitted that the Commarmond artificial ligament is for an entirely different purpose than the Ferree device which is directed to a device for preventing spinal extension. The Ferree device is designed to inhibit full extension; whereas, the Commarmond device is designed to have a flexibility preserving pedicle fixation combined with a stiffness during traction and during compression, limiting the kyphosis/lordosis between two vertebrae, and consequently, the shearing of the discs. There is

absolutely no reason why Ferree would want to have a secondary winding which acts a wedge and provides stiffness during compression. Thus, there is no reason to combine the references in the manner suggested by the Examiner. The mere fact that a structure is disclosed in the prior art is not sufficient basis to find obviousness.

Still further, Commarmond does not cure the defect in Ferree of the second rod being embedded in the support. In Commarmond, there is no support surrounding the winding (25). Therefore, even if the references were properly combinable, they would not meet all of the limitations of independent claims 11 and 18.

For these reasons, claims 11 and 18 are allowable over the cited and applied references.

Claims 12 - 17, 19 and 20 are allowable for the same reasons as their parent claims as well as on their own accord. The Howland publication does not cure the aforementioned deficiencies of Ferree and Commarmond.

The instant application is believed to be in condition for allowance. Such allowance is respectfully solicited.

Should the Examiner believe an additional amendment is needed to place the case in condition for allowance, he is hereby invited to contact Applicant's attorney at the telephone number listed below.

A notice of appeal is enclosed herewith in the event that the Examiner maintains the rejections of record. Also enclosed is a request for a three month extension of time and a check in the amount of \$1,520.00 to cover the extension of time and notice of appeal fees.

Should the Director determine that an additional fee is due, he is hereby authorized to charge said fee to Deposit Account No. 02-0184.

Respectfully submitted,

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I, Karen M. Gill, hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313 on September 27, 2007.



